

Claim Rejections – 35 USC § 102

The Office has rejected claims 41, 48, 49, 52, 56, 63, 64 and 66 under 35 USC 102(e) as being anticipated by Bahl. The applicant respectfully traverses these rejections. The arguments presented in the applicants January 12, 2007 response still apply and the applicants narrow the points of their arguments herein.

Bahl focuses on cellular network traffic and with the location of a cellular device within the topology of the cellular network. Bahl does not describe, suggest or teach the detection of physical location of a mobile unit on a physical road. The following passages from Bahl clearly demonstrate that Bahl focuses solely on the cellular network footprint and not on physical locations.

When Bahl discusses the route or path of a mobile unit, it refers to a path or route "through the cells of the network" as detailed below:

Column 5, lines 5-10 - "If the predicted path through a **network cell** is in a fringe area where the signals of adjacent cells overlap....."

Column 11, lines 36-39 – " FIG. 4 is a flow diagram illustrating the method of the invention for predicting the future route of the mobile **through the network**;"

Column 11, lines 54-55 – " The mobile's current path **through the cells of the network** is tracked in the buffer memory...."

When Bahl discusses location prediction, it is not referring to physical location but rather, when describing local prediction he refers to "the next cell to be crossed" and "the geometry of the cells in the network" and when he discusses global prediction he refers to "the mobile's path through the cells of the network" as detailed below:

Column 11 lines 36-59 - " I. The Hierarchical Location Prediction

According to the invention, the route of a mobile unit MU in the network of FIG. 1 is predicted by a hierarchical location prediction (HLP) method as illustrated in FIG. 4. As illustrated, the prediction

of the movement of the mobile unit MU is carried out at two levels-i.e., local prediction (LP) and global prediction (GP). **LP provides a best estimate of the next cell to be crossed based on the instantaneous trajectory of the mobile unit MU and the geometry of the cells in the network**, while GP identifies the overall path in a database that best matches the route of the mobile thus far. Using the LP alone, a prediction of the next cell the mobile will move into can be made with a high degree of accuracy.

A. Global Prediction

For global prediction, a predetermined number of the mobile's previous routes are stored in the user profile memory 33 (FIG. 2) as the user's mobility patterns (UMP), which are indexed to the time the routes were taken by the mobile (FIG. 4). **The mobile's current path through the cells of the network is tracked** in the buffer memory 31 of the mobile unit MU (FIG. 2) as the user's actual path (UAP). The UAP is composed of a sequence of recently crossed cells and a prediction of the anticipated next cell (if any) the mobile will enter."

When Bahl discusses traffic and congestion he refers to "signaling traffic" or "congestion caused by unexpected uneven traffic loading in cells" as detailed below:

Column 5 lines 5-14 - "...the network may elect to reserve bandwidth in **the cell that has the lesser amount of traffic**. When the mobile enters **the predicted cell with the higher amount of traffic**, the network will coordinate a handoff to the adjacent cell..."

Column 19 lines 28-31 - "... the invention results in a significant **reduction in signaling traffic** due to location updating"

Column 19 lines 34-40 - "Unexpected **growth of traffic in various cells can lead to local traffic congestion** resulting in the creation of "hot-spot" cells, that is **cells where the data traffic load substantially exceeds the design load**. Prior approaches that have been proposed to alleviate **congestion caused by unexpected uneven traffic loading in cells** include (1) Cell Splitting and (2) Channel Borrowing."

The present invention, in contrast to Bahl, discusses road traffic and physical road locations. The applicants state that this point has been made clear in the specification and on previous responses to the Office. However, the applicant also introduces new claims 68 and 69 which basically include all the limitations of claims 41 and 63 respectively with the added language to accent the physical nature of the location information.

Claims 44, 45, 46, 51 and 66 have also been amended to correct informalities.

The applicants respectfully submit that the presented claims are allowable. Further, the applicants again respectfully submit that the arguments presented herein have been previously presented and in the original specification and claims as filed, and as such, no new search is necessary. Rather, the currently standing rejection should be retracted and the claims should be allowed as presented herein.

Conclusion

Applicant respectfully submits that the currently pending claims are in condition for allowance and respectfully requests that the case be processed to issuance. If the Office has any questions or if there are any actions that can be handled through an Examiner's Amendment, the applicant requests the Office to contact the attorney of record using the below-provided contact information.

Respectfully submitted,

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